

P92

REHABILITATION IN THE PROVINCES OF WESTERN CANADA

An Address by
W. G. ROSS, K.C.

Saskatchewan Legislature
1937

IN THE DEBATE ARISING ON THE ADDRESS
IN REPLY TO THE SPEECH FROM THE THRONE.



THE TIMES COMPANY LIMITED
MOOSE JAW, SASK.



Rehabilitation in the Provinces of Western Canada

An Address by William G. Ross, K.C.

It was with a great deal of pleasure, Mr. Speaker, that I found in the Speech from the Throne this paragraph:

"My Government, however, is appreciative of the plans now being formulated by the Federal Department of Agriculture, for the rehabilitation of agriculture in the drought area and has promised its hearty co-operation in the working out of the plans for dealing with sub-marginal lands, etc."

I propose, therefore, in the balance of the time available to me, to address myself to some of the problems connected with this part of the Speech from the Throne.

Not long ago, some friends of mine in New York sent to me a book written by Paul Sears of the University of Oklahoma and published in 1935. This book should be read by every Minister of Agriculture in Western Canada, by those responsible for the administration of agriculture at Ottawa, and it ought to be a text book prescribed on the curricula of the universities of all Canadian provinces. The book is the work of a scientist, produced in the now famous dust bowl of the United States, where the final, deadly results of erosion are appearing in their worst forms, namely, almost uncontrollable floods and almost uncontrollable dust storms and devastation.

What I wish to do now is to take the scientific principles promulgated in Mr. Sears' book and to apply them to conditions as they now exist in Western Canada, and by that operation to suggest the means whereby we, in this part of the continent, can

avoid some of the pitfalls in which many of our friends in the south are now buried.

Natural history is very clearly defined as the "study of the relation of plant and animal life to their environment." It is the science now known as ecology, and it deals with those specific and clearly defined relationships between individual living things and the atmosphere in which they live. Along with that study there follows, of course, the scientific delving into, and proper maintenance of, the correct balance between those living things after human interference has disturbed that balance. The student of natural history, therefore, when he enters a forest area, or travels over the great prairie plains, does not limit himself to mental observations of what he actually sees there, but he must observe and analyze what is actually happening there.

Serious Erosion

In the province of Saskatchewan there are many areas of vast acreage that have now reached a serious stage of erosion. On the north bank of the Qu'Appelle River, commencing at a point near Craven and reaching to the Saskatchewan River, there is a belt of land from five to ten miles in width and approximately sixty miles in length, involving at least four hundred square miles, that once was fertile prairie capable of pasturing many livestock, domestic and wild. Once it was the habitat of hundreds of antelope, deer and buffalo, because there was water in the valley, protection from cold among its trees, lush grass was plentiful in its low-

lands and the most valuable food of all, the short prairie grass, thrived on its uplands. Cover was there for upland birds of every variety and ideal breeding grounds for migratory waterfowl existed.

On the south bank of the Qu'Appelle, from a point north of Regina to the Saskatchewan River, the same condition existed over an area for another six to ten miles in width and eighty miles in length, covering another four hundred square miles. This surface under present observation contains a total area of, say, eight hundred square miles, or about 512,000 acres.

Hundreds of farm buildings were built on those acres; much of the land was cultivated and produced many thousands of bushels of grain and hundreds of livestock. But the desert marched on relentlessly and surely, and today, with a few intervening spaces remaining where people are holding on by the skin of their teeth, that area is deserted.

Dangerous Cancers

Ten-roomed farm dwellings, many with fireplaces and modern improvements, are there going to waste; splendid barns and outbuildings are falling down. The land itself, first useful and safe when covered with its natural covering, then later for a brief term while under cultivation, is now a dangerous cancer that not only kills at its core, but spreads its roots rapidly in every direction. Its former human occupants now swell the relief lists in the urban centres, and those who still remain in the area are a charge on the governments of the Province and the Dominion. Nature, of course, is doing her own best. Where further attempts at cultivation have not hampered the operation, Mother Nature has attempted to cover her ruthlessly bared bosom with a covering of South Saskatchewan jack pine, commonly known as the Russian thistle.

The ordinary spring run-off water from melting snows and early rainfalls, that once seeped into the ground, now rushes headlong down the ravines into the valley, where it flows unimpeded to cause flood damage elsewhere when joined by other waters flowing from similar devastated areas.

Your observation is trained to another area commencing at the Alberta boundary line, thence eastward along the Saskatchewan River and to the main line of the Canadian Pacific railway to a point south of the city of Moose Jaw. There is the great sand hill range, from ten to thirty miles in width and one hundred and eighty miles long. Contained therein is 1,800 square miles or, roughly, 1,150,000 acres, much of it now shifting sand and another deadly cancer on the face of the earth; a cancer that is not content with eating its own core, but which marches out to the adjoining fertile acres with the assistance of wind and water that is unrestrained.

War caused an intensive demand for more wheat. Here, as in the Argentine and in the southern United States, the ranchers were crowded into smaller quarters or crowded out altogether. If they were not driven out of the picture, they themselves turned plows into land that should never have been touched. Under the most favourable conditions as to rain and wind, this land grew grain for a time, but today, neither grain nor grass, and in much of it not even the Russian thistle can hold root in the shifting, driving earth that covers fences, fills up the gullies, cuts off the low shrubs and everything else in its path.

Here, too, a little better than sixty years ago, the buffalo and the antelope roamed, the mule deer thrived and bird life thrived in natural opulence; today the jack rabbit, the coyote and the crow are chief representatives of the wild life of the area. Having lived half a century at the eastern vortex of these two deserts, a third of it on farms and ranches in the area, I have had ample opportunity not only to view but to see what is happening in that brief space of time in the march of the desert.

Let observation be turned to another area—southeastern Alberta and southwestern Saskatchewan from Govenlock, Saskatchewan, to Manyberries, Alberta, on the north and the international boundary on the south, another area containing about 900 square miles. Here, there are different signs of erosion and more similar to those occurring in States to the south of us..

For miles on miles the upland terrain, instead of being grass covered, presents a rough mosaic design, an octagon of grass and an octagon of bare clay with interstices of little grass striving hard for existence and others of pure clay or sand. An examination of the gullies or ravines reveals not the heavy grass bottom that in dry weather one could drive across with a car, but a gulch, narrow and deep, of exposed clay. Along some of these ravines the traveller will go miles before he can find a crossing, unless someone has erected a culvert on a ranch trail. It will not be long now until the mosaic pattern disappears by the elimination of the octagons of grass into those of bare clay.

March of the Desert

The desert is relentless in its march when it is assisted by wind, and unrestrained water courses over pasturage. In the desert forming along the Qu'Appelle and along both banks of the Saskatchewan River, the cause has been largely cultivation, where there should have been none at all, or careless and shiftless handling of cultivated areas where scientific methods might have been utilized to advantage in portions of the area. In the south-western desert area the cause is chiefly over-pasturage and failure to give pastures the rest period necessary to allow for recuperation in extreme dry period. Here, the grain farmer has been driving the rancher into quarters that are too small, and an even greater danger comes from the existence of the sheep rancher on the open range.

Sheep ranching, uncontrolled, has played havoc in the short grass country, not only in Saskatchewan but in the whole American area. From the point of view of the conservationist, the only economical way in which to rear sheep is in a barnyard, where they can be fed from a store of hay that has been cut from proper places. Having said that, I quite expect that some of my many sheep ranching friends will invite me to come out and help fork the hay.

In addition to the three areas hereinbefore described there are others, perhaps of even greater or lesser

importance, that illustrate beyond any doubt the march of the desert in the western provinces. Natural history can explain the causes of similar situations taken from different parts of the world and in various periods of civilisation from the oldest to the present.

Paul Sears, in the opening chapter of his book, headed "Man, Maker of Wilderness," says:

"The face of earth is a graveyard, and so it has always been. To earth each living thing restores when it dies that which has been borrowed to give form and substance to its brief day in the sun. From earth, in due course, each new living being receives back again a loan of that which sustains life. What is lent by earth has been used by countless generations of plants and animals now dead and will be required by countless others in the future. In the case of an element such as phosphorus, so limited is the supply that if it were not constantly being returned to the soil a single century would be sufficient to produce a disastrous reduction in the amount of life. No plant or animal, nor any sort of either, can establish permanent right of possession to the materials which compose its physical body.

"Left to herself, nature manages these loans and redemptions in not unkindly fashion. She maintains a balance which will permit the briefest time to elapse between burial and renewal."

But "Man, Maker of Wilderness," has from time immemorial in his greed for gain or for strife for survival upset the balance.

"Nature is not to be conquered save on her own terms. She is not conciliated by cleverness or industry in devising means to defeat the operation of one of her laws through the working of another. She is a very businesslike old lady who plays no favorites. Man is welcome to out-number and dominate the other forms of life provided he can maintain order among the relentless forces whose balanced operation he has disturbed. But this hard condition is one which, to date, he has scarcely met. His own past is full of clear and sombre warnings — vanished

civilizations like dead files in lacquer, buried beneath their own dust and mud."

Mr. Sears goes on to recount the construction of the great cities of the Mayas, in Central America, from 1 to 600 A.D. and their subsequent complete destruction, followed by a new empire in the Yucatan. The jungle seemed to recede before the Mayas as they set up a vast civilization, only to turn on them with relentless, ruthless determination to destroy them.

Heed the Teachings

Turn over the pages of any history of any country you choose in Europe, Asia and in parts of Africa and you will find the same development from the conquering of wilderness to amazing fertility and production and finally back to the construction of wilderness again by the acts of Old Mother Nature herself, when humanity, by its slothfulness or carelessness and greed, failed to maintain the natural balance and failed to observe the proper relation between living plants and animals and the atmosphere in which they lived. In other words, destruction came when people failed to heed the teachings of ecologists and students of natural history, and we have had those teachers in every century from Hesiod, who published the first Greek Farmers' Almanac in the eighth century, B.C., down to Paul Sears in the year 1935.

The 1936 floods in the Ohio River and the dire situations of cities on the Grand River in Ontario are just two pieces of proof of man's failure to maintain the proper balance of nature. By ruthless cutting of timbers, draining of marshlands and overpasturage, laying the earth bare, man has released an ordinary, not an extraordinary, supply of water that he cannot now control. So far as the Ohio and the Mississippi are concerned, he has filled up the beds of the rivers with silt and muck, spent millions on building new banks—but the higher the banks the more water rushes down from the erosion in the uplands with devastating results.

It is a proven historical fact that the same mistakes have been made in every new country that the world has ever known. It is equally true that

the same mistakes will be made in the future, and there are not many of such areas left for new development. The present problem is whether individuals and groups of individuals called governments can be made to see that the day of complete destruction is staved off as long as possible. Science can clear up the causes, but science cannot solve the problem, for the solution depends on the application of scientific principles, plus labor. Labor can only be used when it has management to guide it and capital to pay for it.

Serious Problem

It seems certain that the Provincial and Federal Departments of Agriculture have a very complete knowledge of the problem, its causes and the methods of solution. It is not at all certain that more than fifteen per cent. of the members of each prairie legislature appreciate the seriousness of the problem. The Premier of Saskatchewan said, quite recently, as reported in the daily press, that he was profoundly amazed at the ignorance of conditions in the West exhibited by eastern members of the Dominion parliament. Preventive work would have proceeded much more rapidly than it has, if there was a more general appreciation throughout Canada of the nature of our difficulty and the possibilities of its removal.

John Vallance, as the Senior Rehabilitation Officer under the Prairie Farms Rehabilitation Act, has one of the biggest jobs there is on this continent to perform, and, if he stays on it as long as he lives, successors will need to be appointed, because the fight to save this part of the country as the bread basket of the Empire must be a long and continuous one. Conditions as to rainfall will no doubt improve, but we must be prepared for the next great drought period.

Science will demand search for the grains and grasses that will be prolific with a minimum of rainfall; it will demand the maximum service from the natural short grass of the country by proper allocation of the number and kind of animals that the grass will stand and still survive; it will demand proper rest periods for

the soil; it will demand control in every possible manner of the available water supplies.

Speaking of water supplies, it is to be hoped that too much attention and expense will not be taken up with stock-watering dugouts. It should not be necessary for a government to spend the money of the people as a whole in building small dugouts. Every farmer ought to be able, in his own self-interest, to build or dig his own stock-watering dugout, and a good many thousands have done so without assistance in the days that have passed. Governments ought to concentrate their efforts on the larger enterprises — dams, not dugouts; dams, built at intervals of a few miles in the larger watersheds, that will hold back the spring run-off; dams in the tributaries of those watersheds that will keep the rivers from flooding; dams that will provide the larger reservoirs necessary for irrigation, that will provide not wheat but abundance of fodder and garden products on plots where people can support themselves, instead of thronging to the urban centres to swell the unemployed lists or of remaining on rural municipal relief.

Drop in the Bucket

Every credit is due to the Hon. R. B. Bennett and his government for having given us the Prairie Farm Rehabilitation Act, although we may regret that he did not give it to us in 1931 instead of 1935. Every credit is given to the present federal government for adopting the policy of its predecessor, though we may very deeply regret that the amount of money available was not at least ten times as great. While the work that has been done has been good work, it is only a drop in the bucket and the surface only of the great problem is scratched. It is only by the dissemination of wider knowledge in the minds of a greater number of Canadian people of the difficulties confronting the prairie regions; it is only by a deeper appreciation of these problems by the federal government and by members of the federal parliament that a real attempt at solution can be made.

Private Initiative

Everything, however, should not be left to governments to perform. Private initiative has its work and private capital must play its part in working out the solution. The small landowner and rancher can impound his share of water, plant his proper grains and grasses, learn and apply the scientific principles of soil care and erosion prevention. He can provide the rest care for his pasturage and do the best that he can with restoration of the soil that is now on the move. Mortgage companies, land companies, banks and other corporations, with huge investments to protect, must see that they have a part to play in this work, by providing part of the capital that is necessary and by guiding public opinion towards action. They have led public opinion in other great national issues — why not in this?

Ducks Unlimited (Canada)

Credit must be given to the sportsmen of the United States for the attempt they are making to assist in the formation of the new corporation known as "Ducks Unlimited (Canada)." Perhaps a better name might have been chosen, but if the sponsors, by the use of this name, can collect the proposed three million dollars of money, now private capital in the United States, for the purpose of increasing the permanent water surface of the Prairie Provinces of Canada, then we ought to be all pleased with the name of the corporation and mightily appreciative of the efforts of its sponsors. Five years ago, Arthur Etter, then Game Commissioner of Saskatchewan, sent a laconic telegram to the headquarters of the American Game Association. It read: "Dried out, blown out, burned out. No ducks." From then on there was some clear thinking done south of the international border. They spent a good many millions putting their own house in order in various ways, and will spend a good many millions yet. So far as migratory waterfowl are concerned, our neighbors soon concluded that their millions were being spent to correct an evil that existed in what was only 15 per cent. of the breeding area. To do an efficient job of protecting one of the nation's greatest industries and

one of its finest opportunities for sport and recreation, it was found necessary to look across the northern border into Canada, and there to provide the surface water and the cover that waterfowl need for prolific breeding.

Well-Built Dams

When the projects under consideration are completed, a good many thousands of acres of fresh water will be available not only for ducks and other migratory waterfowl but for thirsty domestic life, wild life, and plant life as well.

Farm dugouts are not conducive to growing plant life, but well-built dams across large ravines and small rivers will provide the moisture where grasses and trees will grow in profusion.

The name of this corporation does not adequately describe the value of its work because every dollar that is raised and expended, every cubic foot of earth that is erected, every acre of water that is retained, will be productive of dividends not only in ducks, but in every form of plant life and wild life as well.

This group of American capitalists and sportsmen are setting the finest of examples to those Canadian Corporations that make a fine annual profit out of the seventy-odd millions of dollars that are spent each year in the pursuit of game, in guns, ammunition, fishing tackle, boots, gasoline, tires, automobiles, railway fares, food and hotel accommodation. It is almost reasonable to expect that the example set up by our neighbors in the south would at least stir up and stimulate some of our Canadian corporations and sportsmen of wealth into intensive action along the same lines.

Then, too, there are some misguided interpretations of the objects behind this movement, arising largely through gross ignorance of the ideals of its sponsors. It is not the purpose of "Ducks Unlimited" to acquire lands and to construct dams for the purpose of creating closed and private game preserves for the owners

to enjoy themselves and where the public is kept out.

In Western Canada we are opposed to that idea. We believe in sanctuaries, and plenty of them, but what is sanctuary to the public must be sanctuary to the private individual as well, whether he is rich or poor, half-breed, Indian or white, resident or non-resident. In this province we will stand for no other policy.

No, the definite purpose behind the work of this corporation is not selfishness, but it is based upon that theory in natural science which holds that marshes without wild fowl, forests without deer, elk, caribou and moose, prairies without grouse, partridge and other useful forms of wild life, are indicative of desolation and disagreeable barrenness that should not be allowed to come to this country of ours.

It is impossible to build a fence high enough along the international boundary line to keep migratory birds from flying north over that line in the spring. Down in the valley of the Mississippi an enterprising chap did succeed in breeding a few ducks that stayed there all year. He did this by crossing a South American mallard with a northern. The particular hybrid thus obtained conducted a debate with himself in the spring as to whether he would fly north or south, and not being able to decide the point, stayed where he was. That experiment is not capable of universal application. It has been the earnest endeavor of many of us during the past seven drought years, and before, to convince our good neighbors to the south that it was good economy to spend their conservation money in this country, where eight-five per cent. of the migratory waterfowl have bred for countless generations.

Now that they have decided to enter our fields, let us hope and pray that they will make it fifty millions instead of three.

Surely the west will come back to its own, but it will only stay back when the price of eternal vigilance is spent to keep it back in a healthy and prosperous condition.

Let us profit now by the mistakes made in other parts of the world, mistakes that were made by flying in the face of the natural law that fixes the proper balance between living things and the atmosphere which surrounds them. Let us rectify

our own mistakes by spending until it hurts to restore what has been destroyed with wantonness; and, perhaps, if we are hurt deeply enough, we will not fall into error so easily again.





